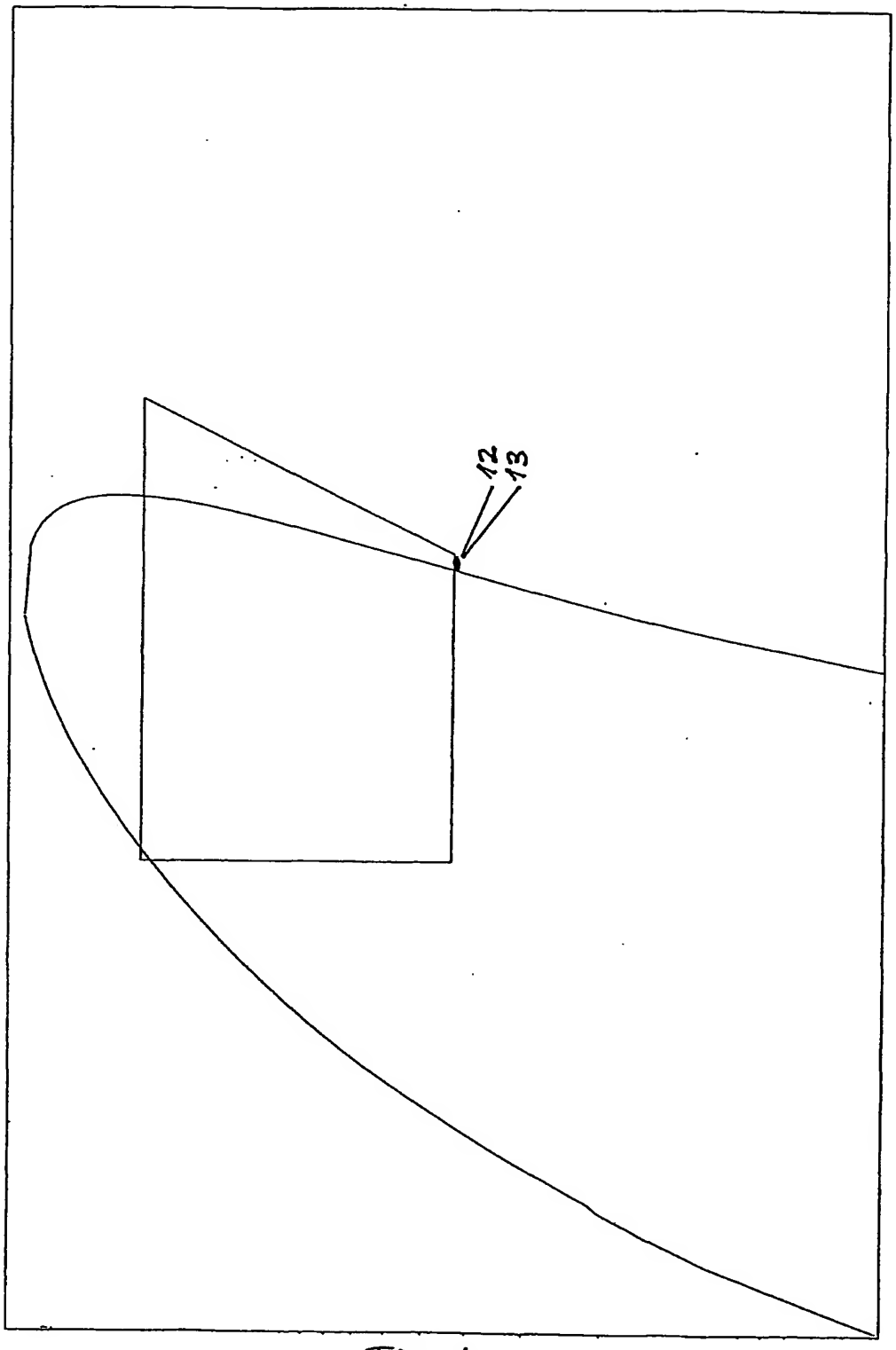

Fig. 1

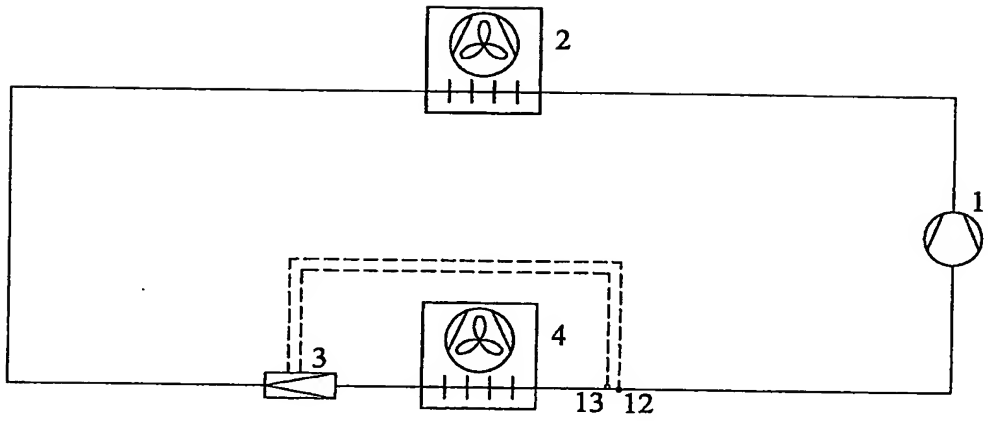

Fig. 2

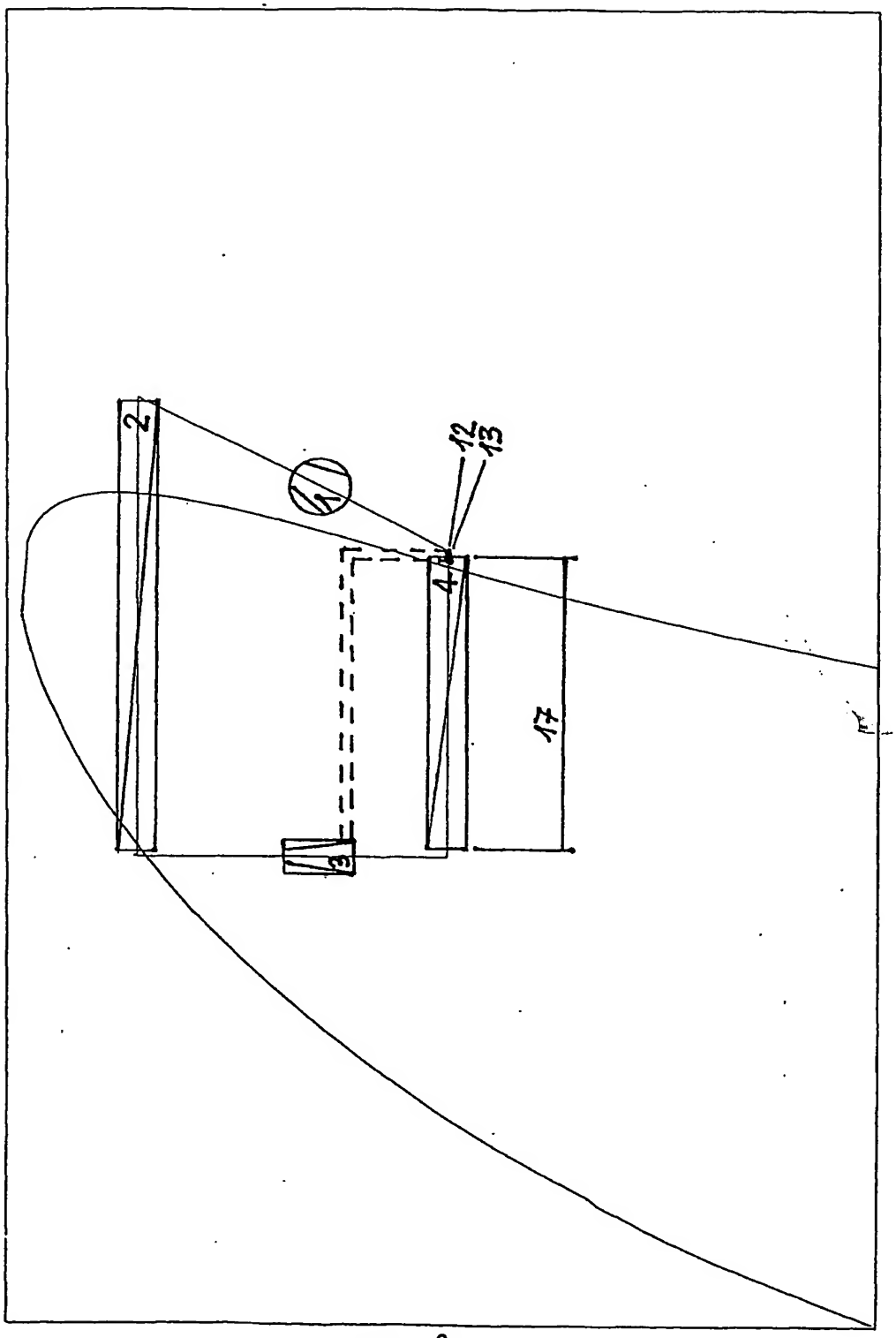

Fig. 3

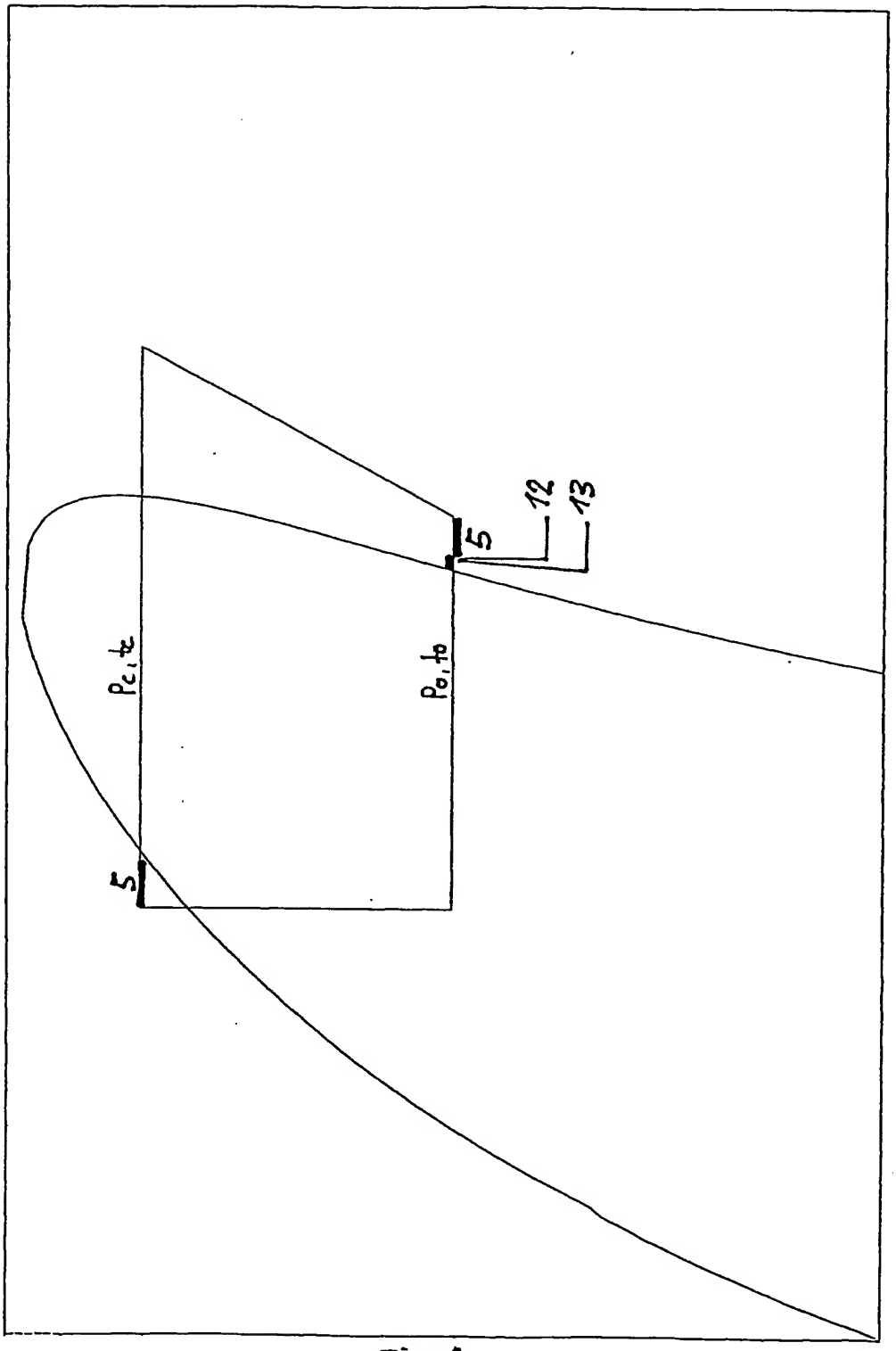

Fig. 4

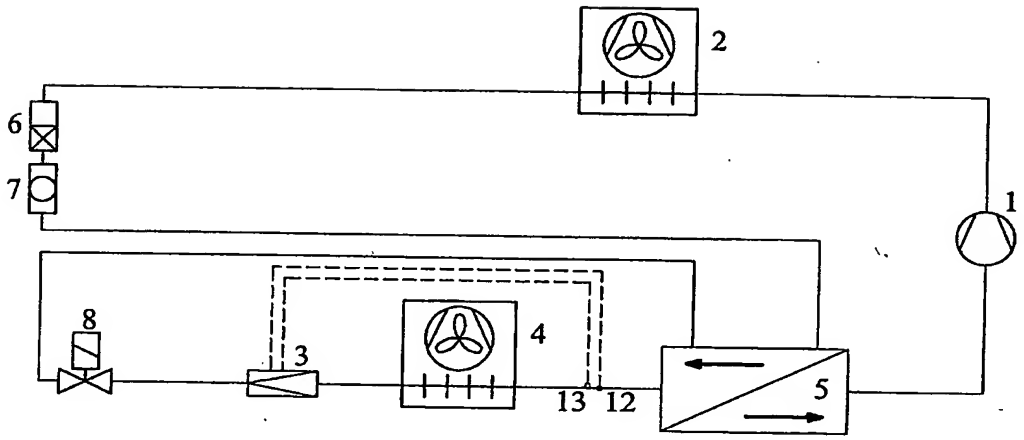

Fig. 5

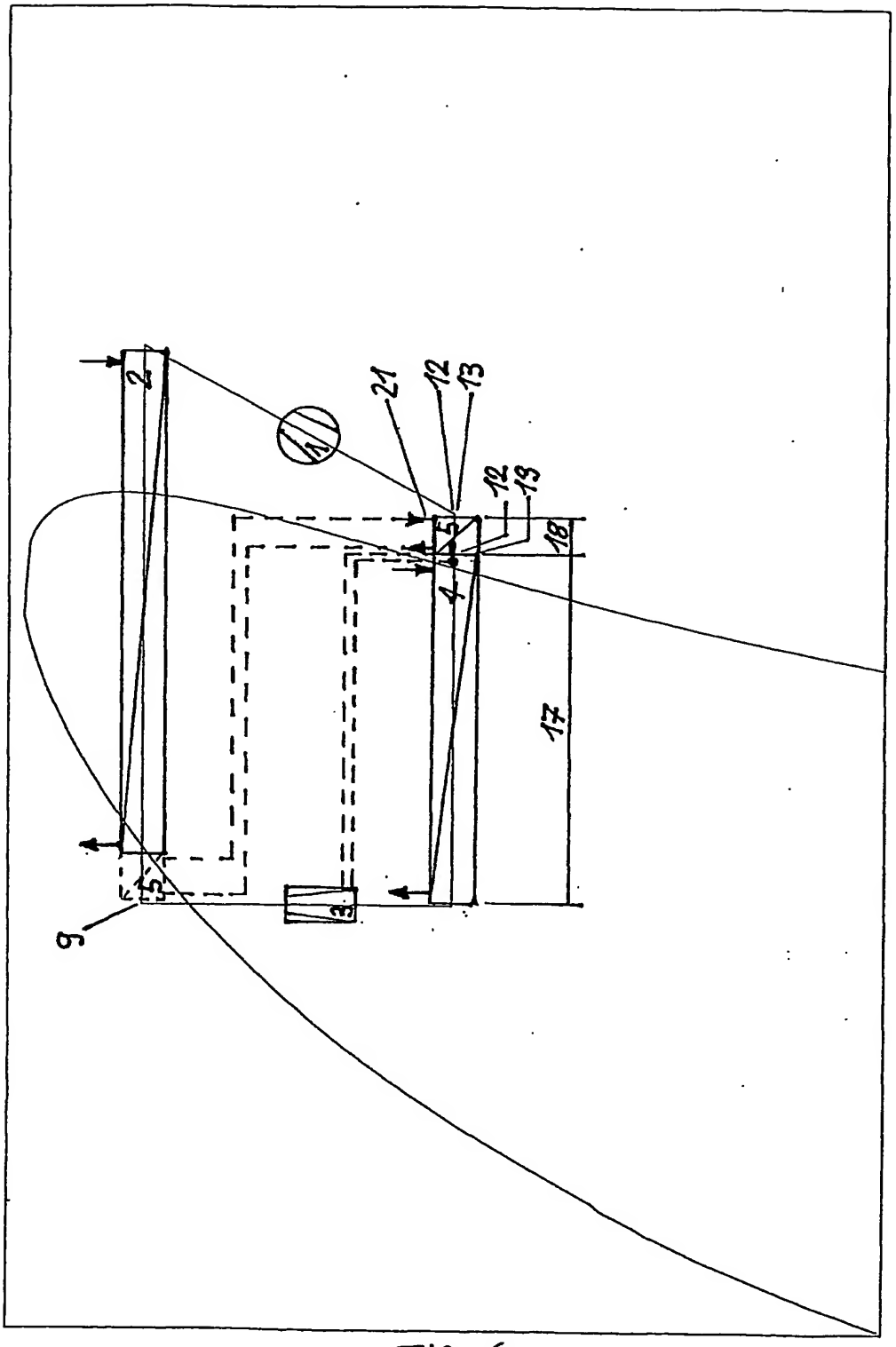

Fig. 6

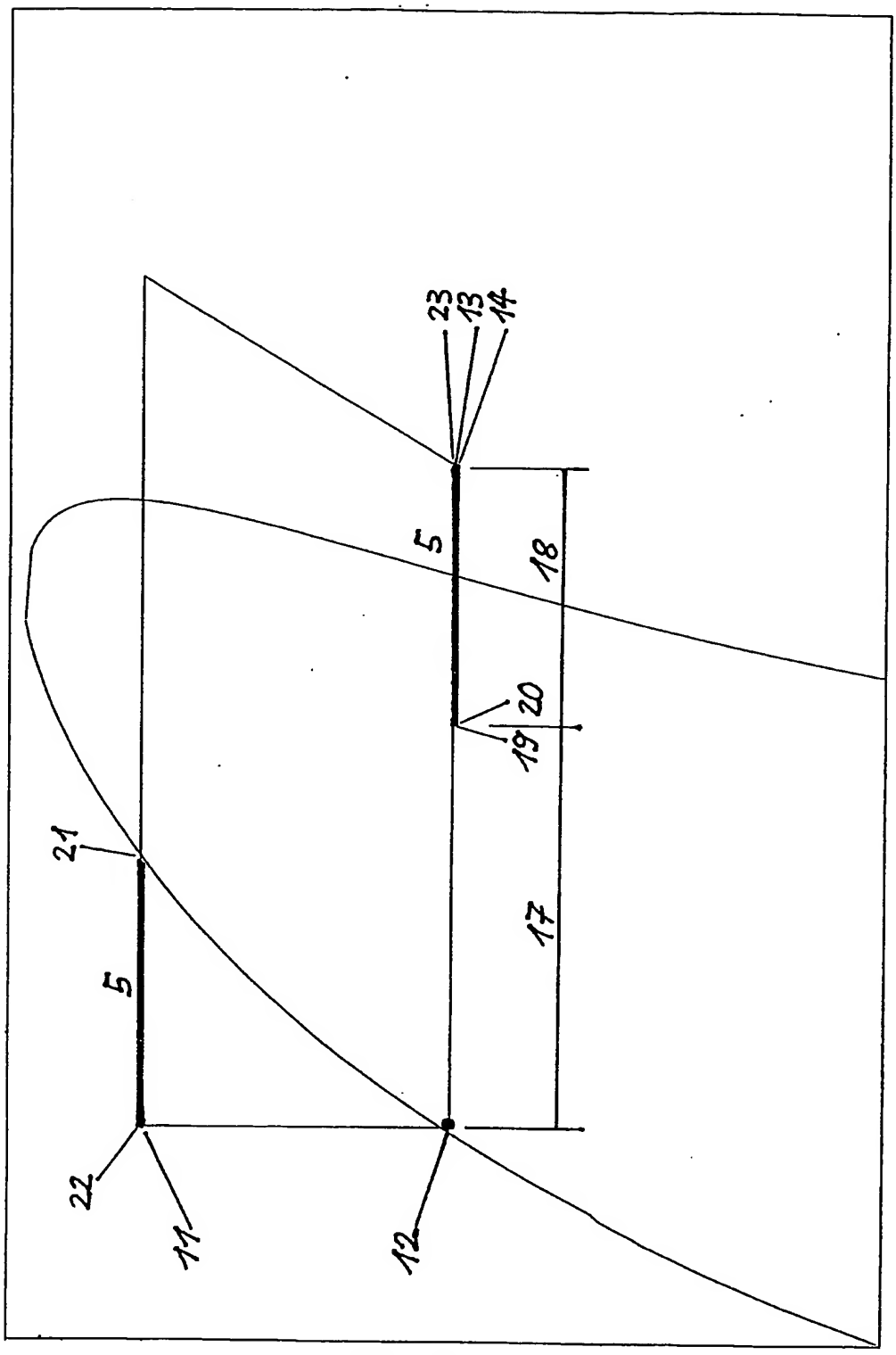

Fig. 7.

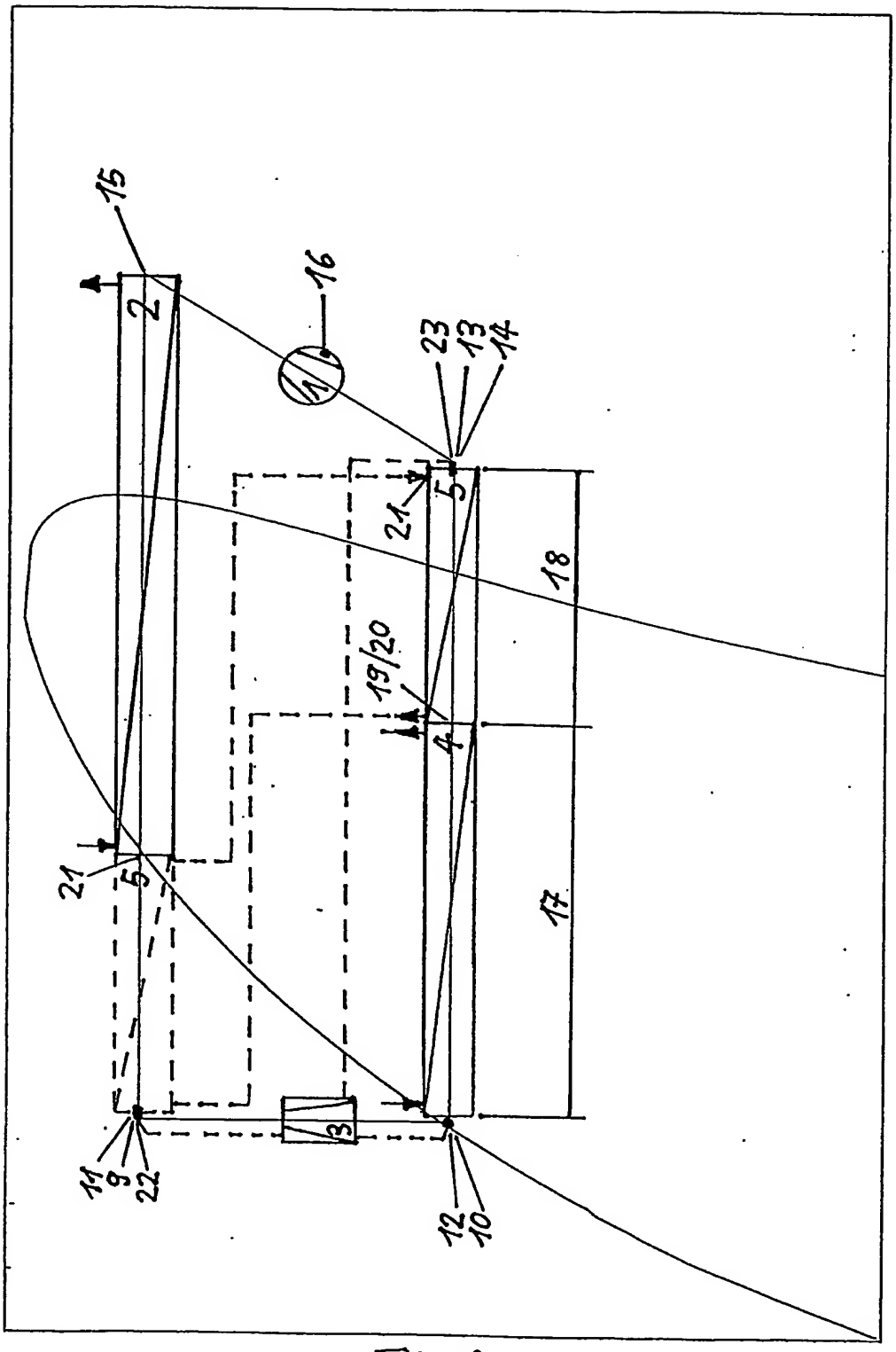

Fig. 8

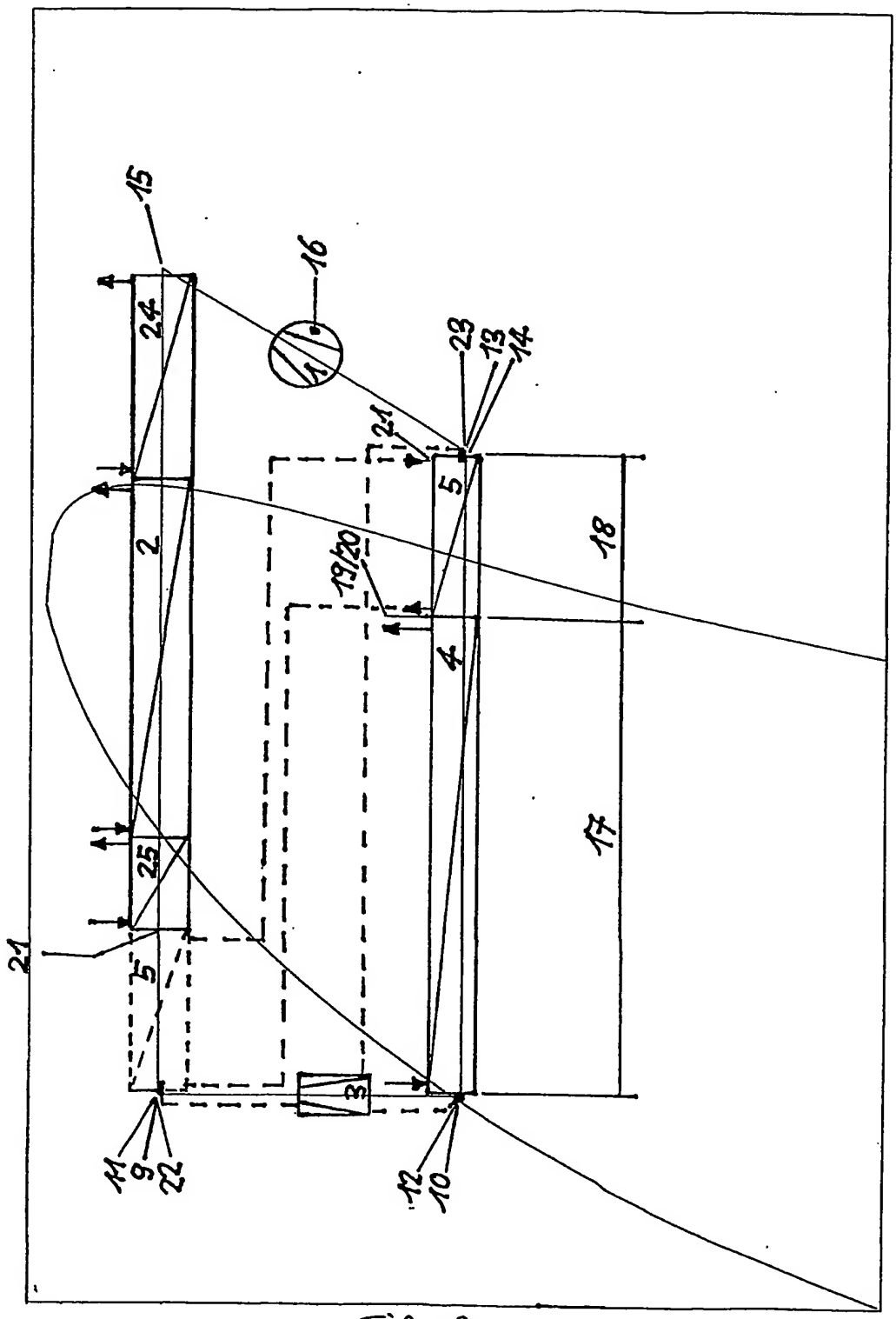

Fig. 9

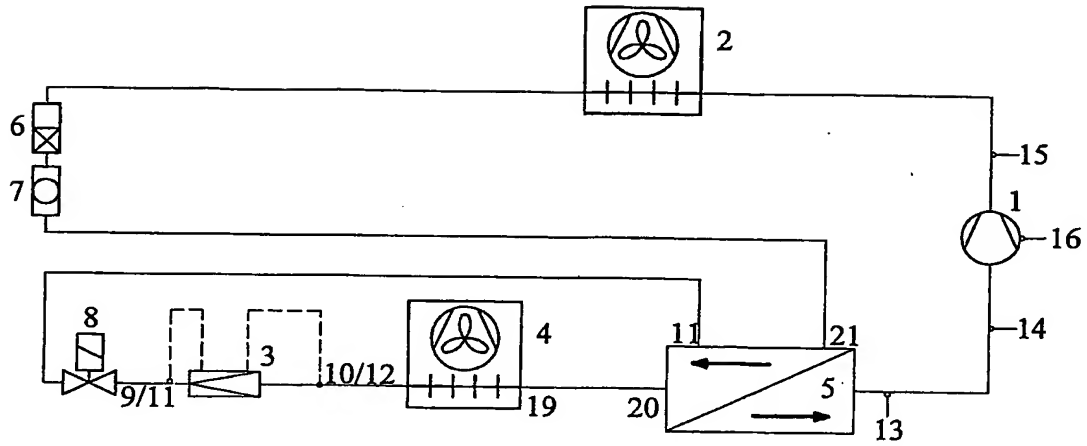

Fig. 10

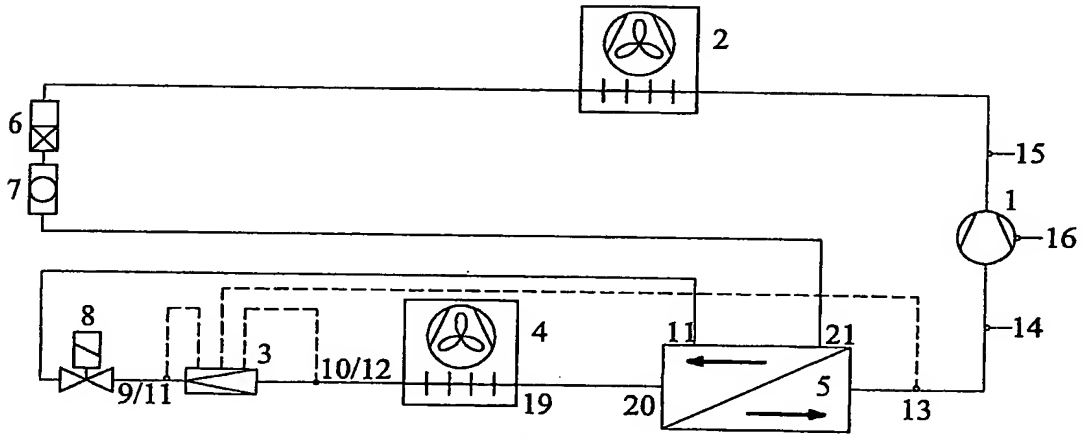

Fig. 11

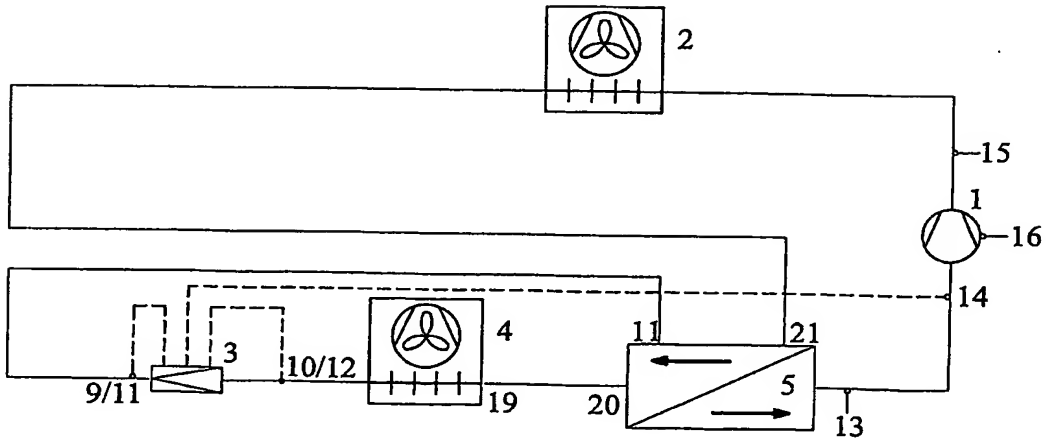

Fig. 12

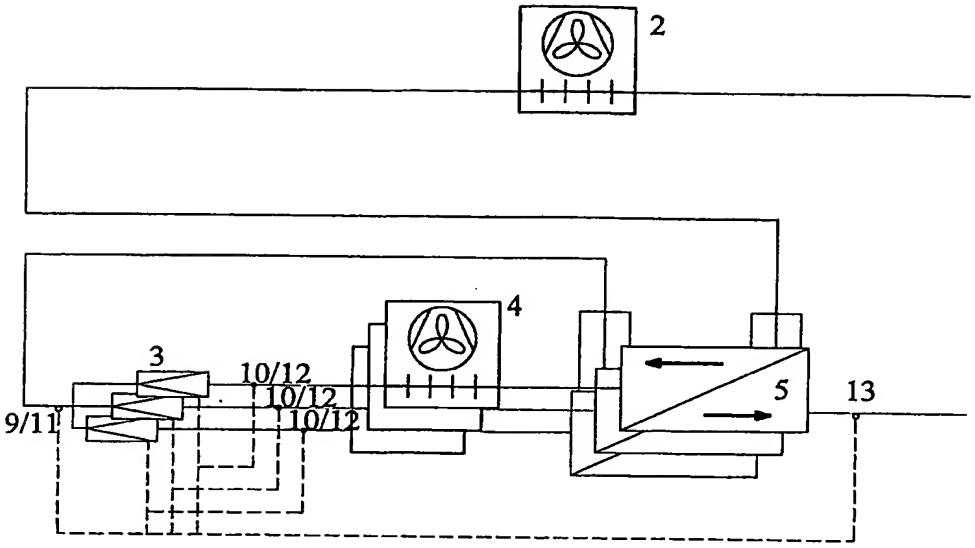

Fig. 13

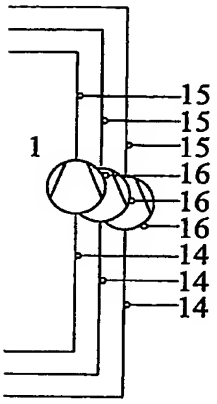

Fig. 16

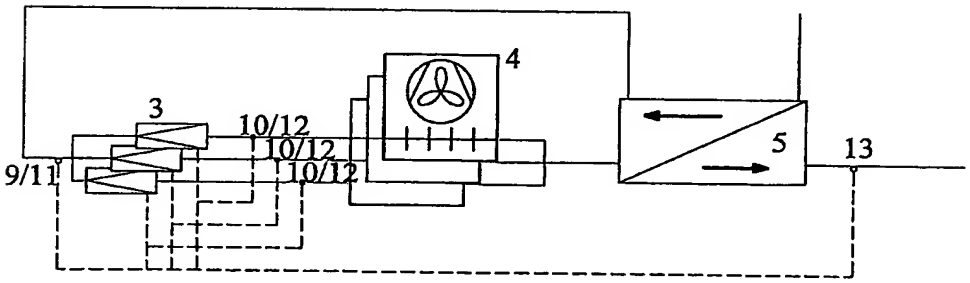

Fig. 14

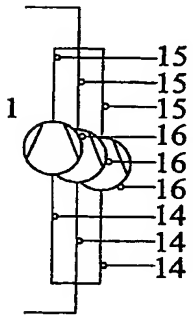

Fig. 17

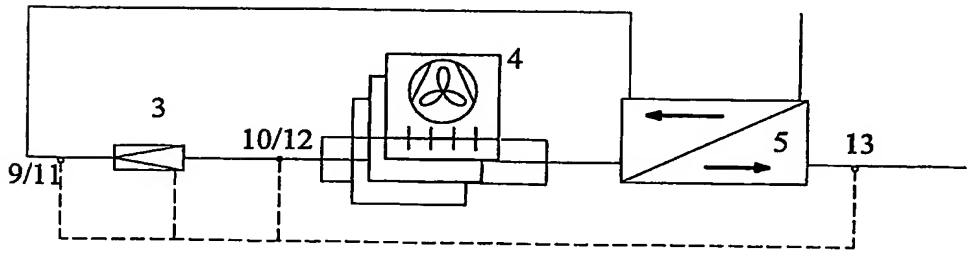

Fig. 15

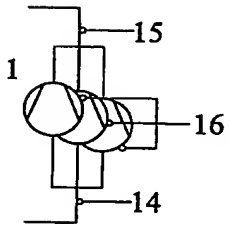

Fig. 18

Legend for the points from the drawings:

- 1 compressor
- 2 liquefier
- 3 injection valve, expansion valve
- 4 evaporator
- 5 IHE (internal heat exchanger)
- 6 drier
- 7 inspection window
- 8 solenoid valve
- 9 temperature sensor at the liquid line upstream of the injection valve
- 10 pressure sensor at the evaporator inlet (process)
- 11 refrigerant liquid temperature upstream of the injection valve
- 12 suction vapor pressure, evaporation pressure
- 13 suction vapor temperature at the evaporator or IHE exit
- 14 suction vapor temperature at the compressor inlet
- 15 hot-gas temperature at the compressor outlet
- 16 compressor oil temperature
- 17 evaporation enthalpy (evaporator power)
- 18 IHE enthalpy (IHE power)
- 19 x point of the state of the refrigerant in the wet steam region (kg/kg), end of evaporator
- 20 x point of the state of the refrigerant in the wet steam region (kg/kg), IHE entry
- 21 IHE entry temperature of the liquid refrigerant
- 22 high pressure
- 23 suction pressure upstream of the compressor
- 24 deheater (optional)
- 25 external supercooler (optional)

Fig. 19